

### **REMARKS**

Claims 1-20 remain pending in the application with the present amendments. In the Office Action, claims 1-7 and 16-20 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,489,658 to Richter et al. ("*Richter*"). Claims 8-9 were rejected under 35 U.S.C. §103(a) as obvious over *Richter*, in view of U.S. Patent No. 5,689,129 to Pearce ("*Pearce*") and claims 10-15 were rejected as obvious over *Richter* in view of a remark. For the reasons set forth below, Applicants respectfully submit that the presently amended claims overcome the rejections and are now in condition for allowance.

As amended herein, claim 1 now recites an insulated gate field effect transistor (a "FET" such as a PFET or NFET) having a source, a drain and a transistor body disposed in a layer of a single-crystal semiconductor overlying and insulated from a bulk semiconductor layer of a substrate by a buried insulator layer. Thus, claim 1 recites a FET provided in a semiconductor-on-insulator ("SOI") layer of a substrate. In addition to having a gate conductor which includes an annular pattern, the FET also includes a conductive body contact. As defined at paragraph [0005] of the Specification, a body contact provides a low-resistance path for the flow of charge carriers to and from the transistor body. It is desirable to provide a body contact to the transistor body of a SOI FET to avoid unwanted changes in the threshold voltage  $V_T$  over time.

Claim 1 further recites a particular location and dopant type for the body contact. As recited in claim 1, the body contact includes a body contact region in the

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single-crystal semiconductor layer in the vicinity of second pattern. In addition, the body contact region has predominantly a second dopant type, i.e., the same dopant type as that of the transistor body and the channel of the transistor.

These features of the invention are neither taught nor suggested by *Richter* or the combination of *Richter* and *Pearce*. *Richter* neither teaches nor suggests providing an SOI FET, i.e., a FET as recited in claim 1 that has a source, drain and a transistor body in a single-crystal semiconductor layer which overlies a bulk semiconductor region of a substrate and is insulated therefrom by a buried insulator layer. *Richter* merely shows an MOS or FET transistor provided in a "semiconductor substrate" 2 (FIG. 4); that is, one which lacks the buried insulator layer needed for a SOI type transistor.

In addition, neither *Richter* nor *Pearce* teach or suggest a body contact including a body contact region provided in the single-crystal semiconductor layer as recited in claim 1. The passage of *Richter* pointed out by the Examiner at col. 3, Ins. 7-8 merely refers to an extension of the gate conductor of the FET to provide a widened square pad area for interconnecting the gate conductor (not the transistor body) with a further electrical conductor. Finally, *Pearce* does not provide the teachings which are lacking in *Richter* with respect to the invention recited in claim 1.

Claims 10 and 16 contain recitations similar to those of claim 1. For these reasons, among others, claims 10 and 16, as well as all other claims of the application which depend from claim 1, claim 10 or claim 16 are allowable over the art cited by the Examiner.

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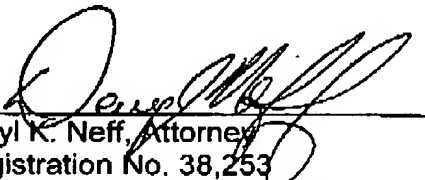
Support for the present amendments is provided, *inter alia*, at paragraphs [0005], [0029], [0037], and [0041] through [0045].

In view of the foregoing amendments and remarks, Applicants submit that the application is now in condition for immediate allowance. If, for any reason the Examiner has any question regarding the content of this amendment or the allowability of the presently pending claims, she is respectfully requested to contact the undersigned attorney at the telephone number indicated below.

A petition of one month extension of time is submitted herewith, together with a copy thereof and authorization to debit the Assignee's deposit account for the corresponding fee. It is believed that no other fees are required upon filing this Amendment. However, if any other fees are required, authorization is given to debit the Deposit Account No. 09-0463 of the Assignee for the amount due, and to credit any overpayment to the same account.

Respectfully submitted,  
Donald W. Plass et al.

By:

  
Daryl K. Neff, Attorney  
Registration No. 38,253  
Telephone: (973) 316-2612

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